



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,849	01/16/2004	Gennadi Finkelshtain	P24712	5103
7055 7590 12/14/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER TOOMER, CEPHIA D	
			ART UNIT 1797	PAPER NUMBER
			NOTIFICATION DATE 12/14/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary

Application No.

10/757,849

Applicant(s)

FINKELSHTAIN ET AL.

Examiner

Cephia D. Toomer

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 70-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 70-97, 99, 101-116, 119-130 and 132-143 is/are rejected.
- 7) ☒ Claim(s) 97, 117 and 131 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This Office action is in response to the amendment filed September 11, 2007 in which claims 70, 84, 101, 119, 132 & 135 were amended and claims 140-143 were added. The rejection of the claims over Finkelshtain is withdrawn in view of the arguments set forth by applicant.

1. Claim 140 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form. Claim 140 does not further limit the process for producing a packaged combination for making a fuel.

.Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 70-97, 101-116, 119-130 and 132-143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsang (US 6,818, 334) in view of Amendola (US 2002008643)

Applicant argues that the borohydride solutions of Tsang and Amendola are not intended to be used as the actual fuel to operate a fuel cell, but as the means to generate hydrogen which is used as the actual fuel.

The examiner has reviewed Tsang, Amendola and the present claims and finds Applicant's arguments unpersuasive. While Applicant has removed the language "for use as a fuel in a direct fuel cell" to the body of the claim, this language is not a limitation. This language does not make a manipulative difference in the process of

preparing a metal hydride solution. Tsang clearly teaches a metal borohydride concentrate that is diluted with water. Amendola teaches that metal hydrides solutions are stabilized with hydroxide compounds to a pH of greater than 7. Therefore, it is irrelevant what the intended use of the solution maybe.

Applicant argues that Amendola neither teaches nor suggests providing a borohydride containing concentrate and diluting the concentrate with a polar solvent to prepare the final fuel for a direct liquid fuel cell.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Amendola was relied upon for teaching that the hydroxide compounds provide the proper pH for the borohydride solutions.

Applicant's arguments regarding impurities in the solution have been considered but are not deemed to be persuasive.

The prior art starts out with the same components as those set forth in the present invention. It would be reasonable to expect that Tsang would not desire impurities in his solution to avoid significant harm to his fuel cell.

Applicant argues that Tsang is not directed to a method of reducing the decomposition of a fuel for a direct liquid fuel cell during storage of the fuel.

Tsang teaches that his purpose is to produce a fuel of borohydride that evidences long term stability. He accomplishes this by keeping separate the alkaline metal hydride solution from the polar solvent. This is what Applicant does.

Applicant argues that Tsang fails to motivate one of ordinary skill in the art to prepackage solutions A and B. Applicant argues that Tsang is not suitable for portable devices.

The examiner respectfully disagrees. The passage cited by Applicant bolsters the examiner's position. It is clear that Tsang has compartmentalized or prepackaged the solutions. With respect to Tsang and portable devices, there is nothing in Tsang to suggest that the solutions and devices would not perform their attendant function in portable devices.

3. Claim 98, 117 and 131 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach that the second compartment comprises at least one of aliphatic and an aromatic amine stabilizer.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

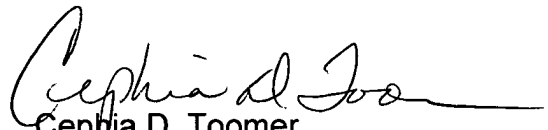
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application/Control Number:
10/757,849
Art Unit: 1797

Page 6

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cepha D. Toomer
Primary Examiner
Art Unit 1797

10757849\20071209
5.